

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings of claims in the application:

LISTING OF CLAIMS:

1-11 (cancelled)

12. (new): A lactoferrin polypeptide comprising the amino acid sequence of phenylalanine (F), lysine (K) and aspartic acid (D) obtained by treating lactoferrin with serine protease.

13. (new): The lactoferrin polypeptide according to claim 12 wherein the serine protease is elastase.

14. (new): The lactoferrin polypeptide according to claim 12 characterized in that its molecular weight is less than 25 kDa.

15. The lactoferrin polypeptide according to claim 13 characterized in that its molecular weight is less than 25 kDa.

16. (new): Inflammatory inducing substances based on a lactoferrin polypeptide which has inducing activity for production of various inflammatory cytokines and comprise the amino acid sequence of phenylalanine (F), lysine (K) and aspartic acid (D), and on the synthetic polypeptide thereof.

17. (new): Inflammatory inducing substances based on a lactoferrin polypeptide which has inducing activity for

production of various chemokines and comprise the amino acid sequence of phenylalanine (F), lysine (K) and aspartic acid (D), and on the synthetic polypeptide thereof.

18. (new): Inflammatory inducing substance based on a lactoferrin polypeptide which has enhancing activity for expression of NFκB and comprise the amino acid sequence of phenylalanine (F), lysine (K) and aspartic acid (D), and on the synthetic polypeptide thereof.

19. (new): Inflammatory inducing substances based on a lactoferrin polypeptide which comprises the amino acid sequence of phenylalanine (F), lysine (K) and aspartic acid (D), and on the synthetic polypeptide thereof.

20. (new): The inflammatory inducing substance according to claim 16 wherein its molecular weight is less than 25 kDa.

21. (new): The inflammatory inducing substance according to claim 16 characterized in that it is obtained by treating lactoferrin with serine protease.

22. (new): The inflammatory inducing substance according to claim 21 wherein the serine protease is elastase.

23. (new): A production method for isolating and purifying a lactoferrin polypeptide comprising the amino acid sequence of phenylalanine (F), lysine (K) and aspartic acid (D) from human or bovine lactoferrin by digesting the human or the

bovine lactoferrin with serine protease, followed by purification.

24. (new): The production method according to claim 23 wherein the serine protease is elastase.

25. (new): A synthetic peptide production method characterized by determining the lactoferrin polypeptide according to claim 23 with amino acid sequencer and preparing a synthetic peptide.

26. (new): The production method according to claim 23 for the synthetic peptide characterized in that said purification is carried out by SDS-polyacrylamide gel electrophoresis, gel filtration, concanavalin A (Con A) affinity chromatography and lactoferrin antibody attaching affinity chromatography.